

REMARKS

Applicant has carefully reviewed the Office Action dated November 28, 2005. In response, Applicant respectfully traverses the rejections of all claims, which are amended only to correct formalities and to adjust the dependency of claims 15 and 18. In light of the following remarks, reconsideration of the rejections and passage of the application to allowance is respectfully requested.

As presented in the last Amendment document, independent claim 1 explicitly recites an average fiber diameter for the various fibers recited of "18-22 microns." Similarly, independent claim 27 as previously presented explicitly recites an average fiber diameter of between "18-30 microns." Both of these claims also expressly require a material with 20-60% by weight of a low melt bicomponent fiber.

The Office continues to rely solely on U.S. Patent 5,851,355 to Goettmann in support of the rejections of claims 1 and 27 on obviousness grounds. However, several significant points of distinction are overlooked in making the rejections. First, Goettmann explicitly teaches a non-woven web incorporating only 1 to 10% by weight of the second thermoplastic binder material (see particularly col. 3, lines 65-67), a point that the Office does not contest. This is in contrast to Applicant's claimed invention, which requires an insulating material incorporating from 20 to 60 weight percent low melt bicomponent fiber. Not only is the weight percentage range for the second thermoplastic binder material in Goettmann far outside the claimed range deemed necessary by the Applicant to achieve the desired result in the present invention, but the present invention requires anywhere from 2 to 6 times as much low melt bicomponent fiber as taught in Goettmann.

In response to Applicant's position, the Office posits that "it would have been obvious to optimize the amount of low melt bicomponent fibers," but does not supply any reason or substantial, objective evidence as to why such is the case. The statement is made that "Goettmann provides support to adjust various parameters such as the amount of bicomponent fibers," but this alone does not establish that it would be obvious to "optimize the amount of low melt bicomponent fibers" as contended, when there is otherwise no cited motivation or suggestion to do so. The same is true of the statement in Goettmann that the "range and blend of bicomponent fibers may also be varied," which in no way suggests using 2 to 6 times as much low melt bicomponent fibers, as claimed (especially when the reference cited actually teaches away from such a marked increase in view of the desire for a specific porosity).

Secondly, and perhaps more importantly, the low melt bicomponent, high melt bicomponent and staple fibers according to the express terms of claim 1 all have an average fiber diameter of between 18-22 microns. As set forth in independent claim 27, these fibers all have an average fiber diameter of between 18-30 microns. In accordance with the limitations of either claim 1 or 27, the minimum average fiber diameter is thus 18 microns.

Using Applicant's rough calculation of a maximum diameter in Goettmann of 17.6 microns (which in and of itself is not objective evidence of the prior art that the Office can rely upon), it is contended that this value "touches Applicant's claimed range when rounded." While this may be true, there is absolutely no legal or factual support for the proposition that the Office can simply "round" values found in the prior art to fall within a range recited in the Applicant's claim. Quite the contrary, the law is very

specific as to when a range in a claim can be met by the prior art, and the Office cites no law in support of the theory that "rounding up" is appropriate. Moreover, from a factual standpoint, Goettmann clearly teaches that this 17.6 micron value, even if accurate, would be the maximum diameter. Rather than suggesting the Applicant's range, this teaching would inform a skilled artisan that rounding up would be inappropriate, and that doing so would exceed the stated maximum value.

In making the rejections, the Office also ignores the requirement in claims 1 and 27 that the average fiber diameter of the low melt bicomponent fibers, high melt bicomponent fibers, and staple fibers is between 18-22 microns. Even if one of the fibers taught in the reference falls within the claimed range (which is not the case here), it does not follow that the "average" diameters of all three types of fibers would also fall within that range. The Office cites no evidence regarding the diameter of the low melt and high melt bicomponent fibers in Goettmann, which makes it impossible to support the contention that the "average fiber diameter" would fall within the claimed range, even if the staple fiber diameter is "rounded up" to 18 microns.

Indeed, a review of product literature available online for the Kuraray EP-101 fibers and N-720H fibers mentioned in Goettmann suggests that the diameters of these fibers are substantially less than 17.6 (see Exhibit A). Of course, this means that the average fiber diameter of the fibers in the only embodiment in Goettmann where the diameters can possibly be estimated cannot be greater than 18, as required in Applicant's claims. Reconsideration is respectfully requested.

The Office also relies on *In re Boesch*, 617 F.2d 272, 205 USPQ2d 215 (CCPA 1980) for the proposition that the various limitations in claims 1

and 27 at issue are "result effective variables." The decision of *In re Boesch* indeed stands for the concept that discovering an optimum value of a result effective variable involves only routine skill in the art. However, the concept of "optimization" defined in *Boesch* relates strictly to the situation where the prior art actually teaches a constituent range overlapping that claimed in the patent application in issue. See *In re Boesch*, *supra* at 617 F.2d at 274 ("Each of the ranges of constituents in appellants' claimed alloys overlaps ranges disclosed [in the prior art].") (emphasis added). That is absolutely, totally and completely different from the present situation wherein the cited prior art explicitly teaches a range outside the one required in claims 1 and 27, a point of fact with which the Office agrees. Thus, *In re Boesch* is factually distinguishable and not controlling, which means that it certainly cannot support the Office's rejections.

In the Action, the Office also posits that "it is known in the art that Kuraray EP-101 fibers and N-720H fibers . . . comprise polyethylene terephthalate as the polyester component." However, no objective evidence or reference is provided in support of this contention. If such a reference exists, the Office should provide it or withdraw the rejection. See *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970) ("[W]hen a reference is relied on to support a rejection, whether or not in a 'minor capacity,' there would appear to be no excuse for not positively including the reference in the statement of rejection."). If no such reference exists, then the Office's argument is akin to the kind of "common knowledge" argument that has been squarely rejected by precedential decisions of the Federal Circuit. See *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002) (reversing an Examiner's rejection based on "common knowledge" holding that

“‘[c]ommon knowledge and common sense,’ . . . do not substitute for authority when the law requires authority.”).

If the Office persists in this line of rejection, Applicant respectfully requests some “authority,” such as a prior art reference, showing that the core of Kuraray EP-101 fibers and N-720H fibers is polyethylene terephthalate, or else withdrawal of the obviousness rejections as lacking *prima facie* support. Alternatively, Applicant invites the Office to submit an Affidavit in support of the underlying factual proposition, as required by 37 CFR 1.104(d)(2). This will allow the Applicant to submit any conflicting evidence available and thereby establish a proper record for purposes of appeal. See *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) (holding that, with respect to core factual findings, “the Board must point to some concrete evidence in the record in support” of them, rather than relying on its assessment of what is “well recognized” or what a skilled artisan would be “well aware”).

After considering these distinctions noted above in light of the cited case law it is believed the Office will agree that the invention as set forth in independent claims 1 and 27 patentably distinguishes over the Goettmann patent and the other references of record. Further, claims 5-7 and 9-14, 16-17, and 19-26 depending from claim 1 and claims 15, 18, and 28 depending from claim 27 patentably distinguish for the same reasons. Accordingly, all the claims remaining in the application are in condition for allowance. Consequently, the early issuance of a formal Notice of Allowance is earnestly solicited. Of course, should the Office note any remaining issues she is respectfully requested to contact the Applicant’s attorney of record in order to expedite the prosecution of this patent

application. Any fees required in connection with this Response may be debited to Deposit Account 50-0568.

Respectfully submitted,

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